

Gray, Idiosyncratic, and Generative: Fathoming the New Old Workforce

Ernie Stark
Saunders College of Business
Rochester Institute of Technology

Paul Poppler
Bellevue University

We investigated the organizational implications of the relationship between the pro-social behavior of generativity and an aging workforce under assumptions of increasing mortality awareness. The study involved secondary analysis of data from an existing nationally representative random-digit-dial sample of non-institutionalized English-speaking adults, aged 25 to 74. The results provided empirical evidence of a direct path between employee self-acceptance and a potential for generativity, as well as an indirect path mediated by a desire for idiosyncratic social contribution. The respondents' age moderated the direct path and the indirect path, but moderation of the indirect path was not as originally anticipated.

INTRODUCTION

In reading contemporary media reports, one could be excused for concluding that Google, the paradigm for innovative and fast-moving organizations, is characteristic of the U.S. workforce. By many accounts, Google is a company that hires bright young people (e.g., median age 29 years per Thibodeau, 2015) and then turns them loose in an internal environment that is built to foster peak performance, speed, and innovation. Such terminology creates mental images of vigorous and energetic young workers dominating today's business organizations, and, indeed, "youth" has been the labor standard held in highest esteem (Kite & Wagner, 2004).

Unfortunately, such images are illusionary and far from authentic because today's workforce reflects a nuanced demographic reality. Since 1990, older workers have increasingly delayed their exit from the workforce due to a number of factors including enhanced age discrimination laws, improved health and longevity, reduced (or collapsed) guaranteed retirement plans, globalization, and poor personal financial choices (Stark, Poppler, & Ashley, 2014). Currently, one in five jobs is held by someone 55 years or older (Norris, 2011). Even with 76 million Millennials pushing to claim their rightful place (Murphy Jr., Gibson, & Greenwood, 2010), the situation is such that the percentage of prime-age workers 25 to 54 years is predicted to drop from 71.1 percent in 2000 to 63.7 percent in 2020 (Toossi, 2012). In short, instead of a workforce increasingly characterized by young and energetic workers, for some time to come the U.S. workforce will be characterized by a rising number of graying and aging workers, a situation that society has heretofore not faced (*Washington Times*, 2007, July 10).

In past generations, the demise of aging workers was hidden from management as older workers exited the workforce at or around a common retirement age of 65 years (Rodgers, Marshall, Garth,

Mopkins, Remington, Siemering, & Spivey, 2011). Many relocated to retirement communities to enjoy their “golden” years. Some moved to distant cities to be close to family members, while others remained in the same geographical location but withdrew from social contact with workplace colleagues. With almost 38 percent of the U.S. workforce projected to be composed of individuals 65 and older by 2030 (U.S. Bureau of Census, 2016), management likely will find it impossible to ignore the presence of workers who continue to succumb to the depredations of increasing age while remaining employed. Specifically, if more than one-in-three workers will be 65 years or older by 2030, if people (for whatever purpose) work into their 70s or later (Stark, et al., 2014), and if individuals in the U.S. begin a noticeable decline in “healthy working days” starting around 69 years of age (Schramm & Burke, 2004), then transience in the workplace associated with a graying workforce will become an increasingly observable phenomenon. For employers, understanding and managing the behavioral and attitudinal responses to persistent age related cues in the workplace represents a previously unfamiliar management challenge.

Statement of the Problem

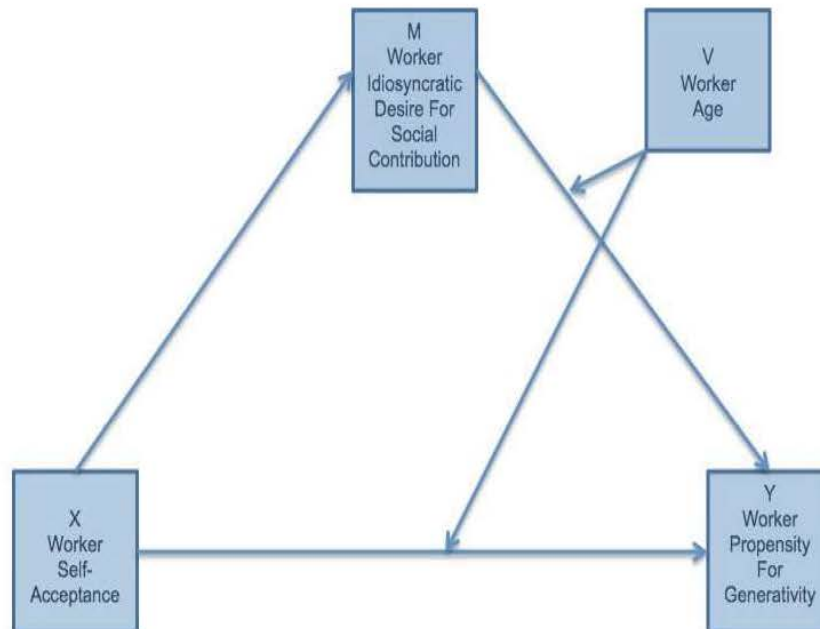
This study focused on how behavior within organizations might be influenced by the unavoidable increase of what in earlier generations would have been termed “elderly” workers. Specifically, this study investigated how aging might influence organization-wide motivation toward a concern for a pro-social behavior such as generativity. However, given that there is a sizable body of research in social psychology suggesting that death awareness can have numerous effects directly relevant to workforce management (Stein & Cropanzano, 2011), the salience of mortality in any discussion of the behavior of an aging and elderly workforce lies just beneath the surface. While this study did not directly measure death awareness, it did address the logical implication of increasing awareness of mortality in the behavioral motivation of aging workers. Figure 1 is a graphic representation of the conceptual relationships investigated in this study.

REVIEW OF THE LITERATURE

Generativity as a Desirable Pro-Social Workplace Behavior

Generativity is considered an inclination toward pro-social behavior driven by an inner need for fertility, productivity, creativity, new products, and new ideas (Erikson, 1950, p. 267). Generativity encompasses projects and involvements that focuses on providing guidance to the next generation, both at work and in the community (Hofer, Busch, Chasiotis, Kärtner, & Campos, 2008; Leigh, 2014), thereby enhancing what Stark (2009) observed as the transfer of critical tacit knowledge to younger employees early in their careers. Individuals who do not experience generativity are theorized to become self-absorbed with their own needs and to undergo psychological stagnation whereby they withdraw from socially valuable work and do not engage in behaviors that enhance transfer of knowledge and skills to younger workers (Torges, Stewart, & Duncan, 2008; Etebarian, Darban, & Damirchi, 2013).

FIGURE 1
CONCEPTUAL MODEL OF THE RELATIONSHIP BETWEEN VARIABLES IN THIS STUDY



Many researchers argue that a propensity for generative behavior is a product of aging and becomes evident only around midlife (see Keyes & Ryff, 1998; Steward & Ostrove, 1998; Stewart, Ostrove, & Helson, 2001). In contrast, Erikson's (1963, 1982) psychosocial growth theory proposes that it is only in the final two of the eight stages of life, and as people become increasingly aware of death, that an individual may, or may not, become concerned with psychological generativity. However, work by Mackinnon, Nosko, Pratt, and Norris (2011) suggests that generativity is not exclusively an issue for the aging; rather, young adults can show relatively high levels of generative concern. Further, Leigh (2014) observed that the overall tendency reported in empirical studies seems to suggest an increase in generative behaviors from early adulthood into midlife with a possible decrease thereafter. On the other hand, a longitudinal study by Einolf (2014) raises the possibility that generativity is somewhat stable throughout adulthood. Finally, a study by Steward and Vandewater (1999) suggests that a concern for generativity does indeed appear in early adulthood, but the associated accomplishments are usually not observable until late adulthood.

We argue that understanding pro-social behavior such as generativity represents a challenge for researchers and practitioners alike in a workforce characterized by increasing numbers of older workers. Specifically, we have identified the inclination for generative behavior as the outcome variable of focus in this study.

Self-Acceptance

Erikson (1963, 1982) proposed that as individuals enter the later stages of life, they engage in reviewing their past and attempt to come to terms with life as it has been lived and the person he/she has become. People try to develop a sense of meaning and worthiness (understood as ego integrity) as opposed to slipping into feelings of hopelessness and despair (Torges, et al., 2008). Butler (1974) suggests a somewhat similar concept by proposing that as people enter late adulthood they engage in a life review, reevaluate their work lives and careers, and generate questions about their personal usefulness. Bauer,

Schwab, and McAdams (2011) argue that in the later stages of life individuals subjectively compare their expectations and outcomes with their currently perceived realities. That is, they ponder their work experiences, events, and achievements seeking an answer to the question, "Were these periods positive and useful, or not?" (Etebarian, et al., 2013). In general, an individual may be satisfied with his/her behavior during periods of work life and experience a sense a comfort by integrating them into his/her ego with the aim of creating a sense of balanced wholeness. On the other hand, an individual may conclude he/she has not experienced a successful and rewarding work life and, for a variety of reasons, has not used the opportunities to compensate for failure, thus increasing the potential for experiencing deep despair (Wiesmann & Hannich, 2011; Etebarian, et al., 2013). As a middle ground, work by Torges et al. (2008) suggests that most individuals neither experience extremes in ego integrity nor ego despair. Rather, the majority of individuals come to accept their past (even with its associated regrets) as unchangeable and come to identify with other similarly imperfect people as they navigate the life review process. Thus, according to Torges, et al. (2008) most individuals resolve regrets and achieve something of a balance between ego integrity and despair through evolution of a deep level of self-acceptance. Self-acceptance becomes increasingly important to a sense of psychological well-being because it provides a degree of meaningfulness to one's life that makes emotional sense (Wiesmann & Hannich, 2011).

Both Erikson, Erikson, and Kivnick (1986) and Butler (1974) assert that this life review process occurs in the last stage of life after one has experienced either generativity or stagnation. However, researchers have recently come to question this assertion. Research has produced evidence that such reviews are not confined to old age (Steward & Vandewater, 1998; Pals, 2006) nor do such reviews occur for all older adults (Merriam, 1993). Our model advances on the assumption that achieving a sense of self-acceptance from a life review process is not limited to the final stage of life; thus we are in agreement with Stewart and Ostrove's (1998) contention that a life review occurs throughout adulthood and serves different purposes depending on a person's age or stage in life. As such, we advocate that there is a positive relationship between the degree of self-acceptance emerging from any life review process that involves concerns about demonstrating generative behaviors.

H1. The degree of self-acceptance emerging from a life review will demonstrate a positive direct effect on the propensity for generative behavior. That is, individuals with higher degrees of psychological self-acceptance will demonstrate greater inclination for generativity than individuals with lower degrees of self-acceptance.

Idiosyncratic Social Contribution

While the literature provides a base from which to assume that self-acceptance has a positive influence on any global conceptualization of generativity, such an assertion implies that a concern for generative behavior is a direct result of an individual having achieved a sense of self-acceptance. Left unaddressed is the possibility that a sense of self-acceptance may influence a concern for generative behaviors through a third, or mediating, variable. Sabir (2015) raises this possibility in pointing out that an alternative form of generativity is evident in the literature; one that emphasizes the creation of a product or legacy as an extension of the idiosyncratic (i.e., distinctive) self. This idiosyncratic, but meaningful, objective is characterized by a certain sense of mission for which the individual feels peculiarly equipped and meriting continued investment of time and uniquely creative, intellectual, and material resources. We find ourselves in agreement with Sabir's (2015) contention that an increased concern for acting in a generative manner may be associated with an individual committing to a niche within his/her culture where he/she irreducibly exists and reaches out for what only he/she can, and must, do. Thus, the idiosyncratic social contribution that generates a legacy (biological, material, or value driven per Hunter & Rowles, 2005) is linked to a sense of achievement. This sense of achievement provides the individual a feeling that he/she has something to contribute (e.g., either in the work place or to the larger society) that can make a difference into the future (Kjeldsen & Andersen, 2013). However, unlike Erikson's concept of generativity, this drive toward making a lasting impression is less concerned with expressions of self-devotion to others and more indicative of a self-focused drive for symbolic

immortality (Newton, Herr, Pollack, & McAdams, 2014). In other words, the benevolent extension of one's distinctive nature and talent into the future contributes to the essence of the generative urge (Wakefield, 1998) and provides an indirect pathway through which self-acceptance influences generativity.

H2a. An idiosyncratic desire to make social contributions will demonstrate a positive relationship with a propensity for generativity. That is, those individuals in the workplace possessing a high desire to contribute to society in a manner likely to build a legacy into the future will demonstrate a greater propensity for generativity than will those individuals possessing a lower desire for social contribution.

H2b. An idiosyncratic desire to make social contributions will mediate the relationship between psychological self-acceptance and a propensity for generative behavior. That is, the influence of psychological self-acceptance on a generativity inclination will be observable indirectly through the mediation effect of idiosyncratic social contribution.

Advancing Age

Becker (1973) noted that an awareness of death is a uniquely human capacity accompanied by emotional stress and anxiety, and it is neither illogical nor unreasonable to assume, as suggested by Stein and Cropanzano (2011), that advancing age is generally attended by increasing recognition and realization of one's mortality. In reference to younger workers, even in the presence of increasing proportions of older co-workers, the ego-related mechanisms should be expected to push aside the conscious suggestions of their own mortality (Vasconcelos, 2015) and limit the stress and anxiety associated with death awareness proposed by Becker (1973). Healthy young adults are generally imbued with feelings of invulnerability and a sense that their bodies will never fail them; this state enables them to expel thoughts of death from consciousness in seeming rational ways such as asserting their own health or assuring themselves that their own death is likely far into the future (Bevan, Maxfield, & Bultmann, 2014).

While achieving an identity as "old" happens slowly and is punctuated by notable moments that signal to an individual and those around him/her that they are changing (Settersten, Jr., & Haagestad, 2015), it is much more difficult for workers entering the later stages of life to ignore an increasing awareness of mortality (Bevan et al., 2014). Most visible is the increasing trend of job related deaths among older workers. An analysis of fatal occupational injuries in 2015 reveals that workers over the age of 64 had the highest fatal injury rate of all workers: 9.4 per 100, 000 full-time equivalent workers compared to all-worker rate of 3.4 (Bureau of Labor Statistics, 2016, p. 13). Less visible, but just as disconcerting, the consequences of poor health decisions begin to take a toll (such as broken bones, hospital visits, and decreasing independence). The familiar self (i.e., sound body, alert mind, and network of social relationships) is certainly present, but it is changing in ways that violate one's sense of consistency and permanence (Sinnott, 2009). When confronted with changes in perceptions of one's physical characteristics and cognitive functioning or when confronted with changes in the social and interpersonal relations which underlay the self we know, one senses a slipping away of that familiar self and movement toward a new entity not yet known (Sinnott, 2009; Diehl, Wahl, Brothers, & Miche, 2015).

A lack of appropriate psychological buffers against increased death awareness undermines an individual's psychological well-being and, in turn, can motivate a desire to reduce anxiety about dying (Juhl & Routledge, 2016). More specifically, Stein and Cropanzano (2011) and Bevan et al. (2014) raise the possibility that because older adults are indeed more sensitive to their mortality than younger adults, older adults are likely to maintain some level of acceptance of death (perhaps to a degree the outcome of life evaluation and reflection) enabling a reduction of death anxiety and an increasing inclination to engage in forms of pro-social behavior with the hope of leaving a legacy for future generations. For instance, evidence suggests that aging adults tend to use more complex reasoning schemas emphasizing multiple perspectives when faced with social dilemmas (Grossman, Na, Varnum, Park, Kitayama, & Nisbett, 2010). Further evidence suggests that in experiencing increasing awareness of death and

mortality older adults are less prone toward corrosive behaviors such as hostility toward others, harshness in punishing others for acts of organizational deviance, and prejudicial attitudes toward out-group members (Stein & Cropanzano, 2011; Bevan et al., 2014).

H3a. Age will moderate the direct effect of psychological self-acceptance on generativity in the absence of a mediator. That is, in the absence of an idiosyncratic sense of social contribution, the relationship between psychological self-acceptance and a concern with generativity will vary as a function of age.

H3b. Age will moderate the strength of the indirect effect of psychological self-acceptance on generativity. That is, the indirect influence of psychological self-acceptance on generativity through the mediation of an idiosyncratic sense of social contributions will vary as a function of age.

METHOD

Sample

Data for this study are cross sectional and obtained from the National Survey of Midlife Development in the United States (MIDUS 3). The MIDUS 3 Study (Ryff et al., 2016) was funded by the U.S. Department of Health and Human Services, the National Institutes on Health, and the National Institute on Aging and was distributed by the Interuniversity Consortium for Political and Social Research at Ann Arbor, Michigan. MIDUS 3 represents a third wave of longitudinal data in which original data was collected between 1995 and 1996 and data for the first follow-up (MIDUS II) was collected in 2004. MIDUS 3 constitutes a nationally representative random-digit-dial sample of non-institutionalized, English-speaking adults, aged 25 to 74 generated between May of 2013 and November of 2014 whose focus is investigating the role of behavioral, psychological, and social factors in understanding age-related differences in physical and mental health at the unit level of the individual and household.

This database was utilized by the authors because it was generated using rigorous sampling techniques and it was large enough to provide desired levels of power for this study. The information therein can confidently be considered representative of the workplace population at mid-career in the United States. The variables of interest to this study were well defined, and associated psychometrics were adequately reported.

Because this study was concerned with workplace behavior, the 3294 observations constituting the MIDUS 3 data were reduced to 1249 by selecting for inclusion only responses from individuals reporting as being employed full-time and currently working a minimum of 30 hours per week. In the achieved sample, 54.2 percent were male and 45.8 percent were female; the average age was 55.9 years; 89 percent identified as White, 3.8 percent identified as Black or African American, 0.06 percent identified as Native American, Alaskan Native, or Aleutian Islander; 0.06 percent identified as Asian; 5.4 percent identified as Other (viz., none of the above); 19.3 percent reported a high diploma as the highest degree achieved; 27.5 percent reported as having graduated from a 4 or 5 year college degree program; 13.8 percent reported having completed a master's degree, and 6.2 percent reported having completed either a Ph.D. degree or a professional degree.

Measures

Generativity Measures

Generativity was measured by six items of the short form of the Loyola Generativity Scale. Use of this measure appears justifiable given that Einolf (2014) identified a number of studies reporting a connection between generative concern and pro-social behavior, and the Loyola Generativity Scale is the most common measure of generativity (Schoklitsch & Bauman, 2012). Respondents were asked to indicate on a 4-point scale (1=A lot; 4=Not at all) as to how well each of six statements described them. For example, one item stated, "You like to teach things to people."

The scale was constructed by calculating the sum of the values of all six items. Items were reverse-coded so that high scores reflect higher standing on the scale. For an item with a missing value, the mean value of the completed items was imputed, but a scale score was not calculated for cases with fewer than three valid items. Across all respondents in the MIDUS 3 data, the scale produced an internal alpha of .852.

Self-Acceptance Measures

Self-acceptance was measured by employing seven items on the self-acceptance subscale of the Ryff Scales of Psychological Well-Being, and its use was deemed appropriate in that the Ryff instrument is considered to be theoretically grounded and focused on multiple facets of cognitive well-being (Seifert, 2005). Respondents were asked to identify their agreement on a 7-point scale (1 = Strongly agree; 7 = Strongly disagree) with statements such as, "In general, I feel confident and positive about myself."

The scale was constructed by calculating the sum of the values of all seven items. Items were reverse-coded so that high scores reflect higher standing in the scale. For an item with a missing value, the mean value of the completed items was imputed. A scale score was not calculated for cases with fewer than four valid items. Across all respondents in the MIDUS 3 data, the scale produced an internal alpha of .844.

Idiosyncratic Social Contribution Measures

This construct was measured by employing the three-item social contribution subscale of Keyes and Shapiro's (2004) measurement of Social Well-being. The subscale purports to measure one's perception of his/her value to society based on an idiosyncratic (e.g., individual) belief that one is a vital member of society with something of value to give to society. Respondents were asked to indicate their agreement on a 7-point scale (1 = Strongly agree; 7 = Strongly disagree) with three statements about perceived value to society. For instance, one item stated, "I have nothing important to contribute to society."

The scale was constructed by calculating the sum of the values of the three items. Items were reverse-coded so that high scores reflect higher standing in the scale. For an item with a missing value, the mean value of the completed items was imputed, but a scale score was not calculated for cases with no valid items. Across all respondents in the MIDUS 3 data, the scale produced an internal alpha of .724.

Age Measures

Respondent age was verified by comparing the stated year of birth with the stated age at the time of the MIDUS 3 survey.

Statistical Approach

Details of the raw data are found in Table 1. None of the variables in the study demonstrated skewness or kurtosis values in excess of ± 1 , thus pointing to normality in distribution (Tabachnick & Fidell, 2013). Examination of the multivariate residuals produced no indication of violation of assumptions regarding linearity or homoscedasticity. Because not all variables in the study utilized response scales in the same unit of measurement, raw data was converted to standardized scores prior to analysis. That is, standardization enabled X and Y to be measured on the same scale and cross at the point where z -scores equal 0, and the slope is measured in equal units representing the strength of a relationship (Tabachnick & Fidell, 2013).

Analysis of the data in this study followed the path analytic regression procedure for moderated mediation process analysis (Preacher, Rucker, & Hayes, 2007; Preacher & Hayes, 2008; Hayes, 2013) and was conducted with no assumptions regarding latent variables (this assumption will be addressed further in the limitations section). Analysis utilized the Process macro for SPSS copyrighted by Hays 2012 - 2016. The statistical model (as opposed to the conceptual model) of this analysis noting the significance of the resulting standardized regression coefficients is found in Figure 2.

RESULTS

The complete model predicts beyond random chance variance in the outcome variable, Generativity: $R^2 = .336$, $F(5, 938) = 94.97$, $p < 0.001$. In the absence of any influence of measures of Social Contribution or Age on the outcome variable, the standardized regression weight for the slope (direct effect) of the measure of Self-Acceptance on the measure of Generativity was .386, $t(1, 950) = 12.890$, $p < .001$. Thus, support was demonstrated for *H1*: The degree of self-acceptance emerging from a life review will demonstrate a positive direct effect on the propensity for generative behavior.

TABLE 1
DESCRIPTIVE STATISTICS AND CORRELATIONS (RAW DATA)

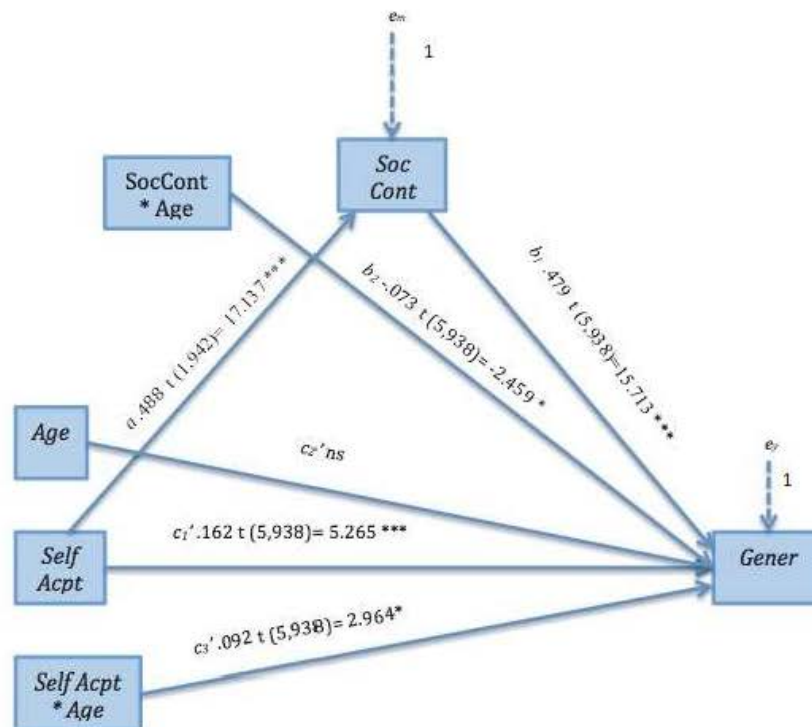
Variable	N	Mean	SD	Age	Self-Accept	Generativity
Age	944	56.45	7.58			
Self-Acceptance	944	38.23	8.00	.127**		
Generativity	944	17.13	3.83	.022	.389**	
Social Contribution	944	16.26	3.44	.055	.488**	.557**

Note ** $p < 0.01$

The standardized regression slope (.479) of Generativity on Social Contribution (b_1) was significant at $p < .001$ providing support for *H2a*: An idiosyncratic desire to make social contributions will demonstrate a positive relationship with a propensity for generativity. The path c_1' represents the difference in the total effect (i.e., the direct effect of Self-Acceptance on Generativity and the indirect effect through Social Contribution ab_1). That is, c_1' (.162, $t(5938) = 5.265$, $p < .001$) equals the total effect of X on Y minus the indirect effect of $a*b_1$. After removing the influence of the indirect effect from the total effect of the measure of Self-Acceptance on Generativity, the path c_1' remains a statistically significant predictor of Generativity. This fact would customarily be identified as evidence of "partial mediation" and judged as evidence in support of *H2b*. However, Hayes and Preacher (2014) caution against using statistical tests of significance in making such a declaration. Rather, they recommend bootstrapping, a nonparametric procedure that involves repeatedly sampling from the data set and estimating the indirect effect in each resampled data set. Bootstrapping provides an empirical approximation of the distribution of $a*b_1$, does not impose assumptions of normality, and enables construction of confidence intervals (CI) from which to interpret an indirect effect. If the path for a hypothesized indirect effect through a variable is not different from zero, then that variable cannot be considered a mediator (Preacher & Hayes, 2008). However, it should be noted that even though the variables in this study were converted to Z-scores prior to analysis, in the process of bootstrapping confidence intervals should not be interpreted as properly standardized (Preacher & Kelly, 2011).

We tested the indirect effect using a bootstrap estimation by determining the unstandardized indirect effects at the 2.5th and 97.5th percentiles of 5,000 samples. The results produced 95% CI = .194, .285. Given that the unstandardized confidence interval did not encompass the value of zero, the indirect effect of Self-Acceptance on Generativity through mediation of Social Contribution was deemed to be significantly different from zero and provided support for *H2b*: An idiosyncratic desire to make social contributions will mediate the relationship between psychological self-acceptance and a propensity for generative behavior.

FIGURE 2
STATISTICAL MODEL OF THE MODERATED MEDIATION ANALYSIS AND THE VALUES
OF THE RESULTING STANDARDIZED REGRESSION COEFFICIENTS.



Support was found for *H3a*: Age will moderate the direct effect of psychological self-acceptance on generativity in the absence of a mediator. Regressing Generativity on the interaction of Age and the measure of Self-Acceptance (path c_1) produced a significant standardized regression coefficient of .092, $t(5, 938) = 2.964$, $p < 0.05$. Following the path analytic regression procedure for moderated mediation process analysis (Hays, 2013), we observed that the direct effect of Self-Acceptance on the measure of Generativity was moderated by the value of the Age measure. That is, the direct effect of Age at minus one SD below the mean (48.4 yrs.) was .076 ($t = 1.849$, $p = ns$), at the mean value of Age (55.9 yrs.), the effect increased to .169 ($t = 5.452$, $p < .001$), and at one SD above the mean (63.4 yrs.), the effect increased .261 ($t = 5.640$, $p < .001$). Thus, the direct effect of measure of Self-Acceptance on the measure of Generativity appeared to be conditional on the age of the respondent.

Regressing Generativity on the interaction of the measure of Social Contribution and age of the respondent (path b_2) produced a significant standardized coefficient of $-.073$, $t(5, 938) = -2.459$, $p < 0.05$. The presence of this interaction suggests that the magnitude of the previously identified indirect effect of Self-Acceptance on the measure of Generativity through the mediation of Social Contribution ($a*b_1$) may be conditional upon a particular value of age. To the point, the question is if $a*b_1$ is moderated by the age of the respondent thus constituting a conditional indirect effect. Preacher et al., (2007) proposed that because a conditional indirect effect is the product of two causal path estimates conditioned on the value of a moderator, bootstrapping can readily be applied. Thus, we tested the conditional indirect effect of the measure of Self-Acceptance on Generativity at the mean value of Age (55.9 yrs.), one SD below the mean value (48.4 yrs.), and one SD above the mean value (63.4 yrs.) using a bootstrap estimation of the unstandardized effects on path b_2 at the 2.5th and 97.5th percentiles of 5,000 samples. At minus one SD below the mean value for Age, the effect was .267 (95% CI = .215, .326), at the mean value of the Age variable, the effect was .231 (95% CI = .189, .279), and at plus one SD above the mean, the effect was

.195 (95% CI = .144, .256). Since the CIs for the Age values did not encompass zero, the effect of the Age variable on $a*b_1$ was confirmed and provides support for hypothesis 3b: Age will moderate the strength of the indirect effect of psychological self-acceptance on generativity. However, the influence of the indirect effect of the measure of Self-Acceptance on the measure of Generativity through the mediation of the measure of Social Contribution appeared to decrease in response to increasing age.

DISCUSSION

What might be surmised from this study regarding the influence of an increasingly aged organizational workforce? To begin, in this study the measure of advancing Age in and of itself demonstrated no relationship with the measure of Generativity. However, this study proceeded with the logical assumption that older workers should be expected to have a greater sensitivity to mortality cues than younger workers. That is, most younger workers are likely to attempt expulsion of conscious thoughts regarding their own mortality by reconfirming their own good health and assuring themselves that the reality of death is likely far into the future. With the increasing visibility of declining health that accompanies an aging workforce, older workers should logically be assumed to find themselves increasingly confronting the realization that their wellbeing (both physical and cognitive) will only continue its deterioration until the time of death.

Acknowledging the above operational assumptions, two results of this study merit consideration. First, this study suggests the degree of self-acceptance which an individual at any stage of life arrives through reflection may directly impact the potential for concern about generative behavior in the workplace, but increasing age appears to be associated with a stronger sense of self-acceptance. A one-way ANOVA of the difference in mean scores on the measure of Self-Acceptance for respondents at the mean of the Age variable, minus one SD below the mean, and plus one SD above the mean demonstrated statistical significance ($F_{2,258} = 5.731, p < .01$). A post-hoc analysis employing a Bonferroni correction demonstrated that the average score of those respondents one SD above the mean value for Age (63.4 yrs.) was significantly higher than the average score for respondents at the mean value for Age ($p < .05$) or minus one SD deviation below the mean value for Age ($p < .01$). Further, the path analytic regression demonstrated that the direct effect of Self-Acceptance on the measure of Generativity minus the indirect effect of a desire for Social Contribution was statistically significant for those at the mean value of the Age variable and those one SD above that mean. Perhaps the relationship between the measure of Self-Acceptance and the measure of Generativity is the result of an improving sense of overall psychological well-being as argued by Wiesmann & Hannich (2011) and Etebarian, et al. (2013). In any event, the strengthening of an individual's self-acceptance in the presence of advancing age, even if implicitly accompanied by the logical salience of increasing mortality awareness, appears to suggest a direct effect on pro-social behavior such a concern for generativity in the workplace.

Second, results of this study suggest that the degree of an individual's self-acceptance influences a desire to make a social contribution which in turn is observed in an enhanced concern for generative behavior in the workplace. Further, the path analytic regression suggests that while increasing age influences the indirect effect of the measure of Self-Acceptance on the measure of Generativity through mediation of the measure of Social Contribution, it is not in the direction initially considered in this study. That is, instead of the conditional indirect effect of the measure of Self-Acceptance on Generativity increasing with age, the opposite appears true. At minus one SD of the Age variable the conditional indirect effect was .267 (95% CI = .215, .326), at the mean value of Age the conditional indirect effect was .231 (95% CI = .189, .279), and at plus one SD the conditional indirect effect was .195 (95% CI = .144, .256).

To the point, it appears that younger workers may be more likely than older workers to translate their self-acceptance into a concern for generative behaviors through an idiosyncratic desire for social contribution in the workplace. A possible explanation for this observation could be that while older workers are sensitive to increasing mortality cues and have a greater likelihood than younger workers of engaging in reflection and ultimately achieving self-acceptance, the idiosyncratic nature of a concern for

social contribution is such that increasing age may be accompanied by a decreasing sense that one has achieved, or ever will, something in his/her life or career that can make a difference into the future and constitute a legacy. Perhaps acknowledging this sense of inadequacy plays an important role for older workers in pursuing an idiosyncratic social contribution that would motivate generative behavior. On the other hand, an alternative explanation may simply be that the desire for personal achievement becomes, on average, less important as individuals age.

Managerial Implications

Generativity is conceptualized as facilitating the transfer of important knowledge and business practices (Hofer et al., 2008; Stark, 2009; Leigh, 2014), thereby contributing to organizational sustainability. In a workplace where it becomes more difficult to ignore the increasing ratio of gray and aging workers, it behooves management to understand and promote the normative role of generativity in nurturing the growth of the next generation (Macaux, 2012). For instance, this study demonstrated a positive relationship between a sense of self-acceptance and a concern for generative behaviors, and this relationship appears to strengthen with age. This finding coincides with findings in a study by Templer, Armstrong-Stassen, and Cattaneo (2010) suggesting that to the degree to which arriving at self-acceptance results in an individual acknowledging the centrality of work to their life, a sense of satisfaction with his/her career, and a sense that individual contributions in the workplace are valued, the more likely the individual is to continue working and pass along their knowledge, experience, and expertise to younger generations. Overall, the implication seems to be that as the ratio of gray and aging employees increases, management needs to generate unique (as opposed to universal) strategies to guard employees from falling into despair and stagnation as mortality cues become increasingly salient. Ghislieri and Gatti (2012) advocate that at the dyadic level this requires being attentive to what the subordinate brings to the relationship, recognizing the nature of the employee's engagement with the firm, helping subordinates gauge the distance between their dreams and reality, and ensuring that subordinates experiences full and legitimate participation in organizational life.

A perplexing dilemma appears in this study from evidence suggesting that the indirect effect of self-acceptance on generative behaviors through mediation of idiosyncratic social decreases with age. As suggested earlier, perhaps this is because for many individuals increasing awareness of morality cues is generally accompanied by a decreasing sense that one has achieved, or ever will, something in his/her life or career that can make a difference into the future and constitute a legacy. To deal with the dilemma, Sabir (2015) argues against considering generativity in global terms as such as creating a legacy or striving for immortality and argues instead for adopting the concept of personal generativity. Certainly, from a global perspective, generativity is recognized as a human need for meaningful social engagement and contribution, but, as Sabir argued, every act of generativity is imbued with idiosyncratic personal meaning. Each instance of personalized generativity is extraordinary in that it is unrepeatable, emerging from each individual's unique configuration of personality, family, community, and culture. Thus, it would appear to behoove management to communicate to all employees, regardless of where they are in the aging process, the value placed on personalized generativity, much like communicating the value an organization accords to strategically important knowledge, skills, and abilities. Personalized generativity should be understood organizational wide as a normal person's unique, but daily, approach to some particular life task characterized by meaning, purpose, and a sense of benevolence toward others as opposed to some journey toward a long-lasting legacy that imbues immortality within the organization setting (Sabir, 2015).

Limitations of this Study

Certain limitations to this study should be acknowledged. First, and foremost, this study involved secondary analysis of existing data, and such studies are often criticized as constituting a "fishing expedition" for significance. In defense of this criticism, we offer that the theoretical paradigm for this study existed a priori in a paper discussing Grant and Wade-Benzoni's (2009) theoretical paper *The Hot And Cool Of Death Awareness At Work: Mortality Clues, Aging, And Self-Protective And Prosocial*

Motivations presented to the Western Academy of Management at La Jolla, CA in 2012. Second, while a typical criticism of secondary analysis of existing data is to question exactly what is being measured and reported, we counter that the variables in this study are well defined and the associated psychometric properties are thoroughly reported in the documentation accompanying the MIDUS 3 data set. Third, the path analytic procedure utilized in this study makes no assumptions about the presence of latent variables. We acknowledge the potential of latent variables, but note that MIDUS 3 presents psychological constructs in their aggregate form rather than in the form of raw data (e.g., individual items) restricting investigation of latent constructs. Fourth, as secondary analysis of existing data, no controls such as random assignment to an experimental and control group could be put into place. Fifth, the results of this study are subject to all of the known weaknesses of self-report surveys including common response bias. Finally, while the MIDUS 3 data set can be considered constituting a nationally representative random-digit-dial sample of non-institutionalized, English-speaking adults, aged 25 to 74 at the household or individual level, the criteria for the MIDUS 3 data used in this study restricted inclusion to those respondents employed full-time and working a minimum of 30 hours per week. Thus, the sample in this study, while adequately representative of gender, emerged as overwhelmingly racially white.

REFERENCES

- Bauer, J. J., Schwab, J. R., & McAdams, D. P. (2011). Self-actualizing: Where ego development finally feels good? *The Humanistic Psychologist*, 39, 121-136.
- Becker, E. (1973). *The denial of death*. Free Press, New York, NY.
- Bevan, A. L., Maxfield, M., & Bultmann, M. N. (2014). The effects of age and death awareness on intentions for healthy behavior. *Psychology and Health*, 29(4), 405-421.
- Butler, R. N. (1974). Successful aging and the role of life review. *Journal of the American Geriatrics Society*, 22, 529-535.
- Bureau of Labor Statistics (2016). *Current population survey: Census of fatal occupational injuries*. Retrieved from <https://www.bls.gov/iif/oshwc/cfoi/cfch0014.pdf>
- Diehl, M., Wahl, H-W, Brothers, A., & Miche, M. (2015). Subjective aging and awareness of aging: Toward a new understanding of the aging self. *Annual Review of Gerontology & Geriatrics*, 35, 1-28.
- Einolf, C. J. (2014). Stability and change in generative concern: Evidence from a longitudinal survey. *Journal of Research in Personality*, 51, 54-61.
- Erikson, E. H. (1950). *Childhood and society*. W.W. Norton and Company, New York, NY.
- Erikson, E. H. (1963). *Childhood and society* (2nd ed.). W.W. Norton and Company, New York, NY.
- Erikson, E. H. (1982). *The life cycle completed*. W.W. Norton and Company, New York, NY.
- Erikson, E. H., Erikson, J. M., & Kivnick, H. Q. (1986). *Vital involvements in old age*. W.W. Norton & Company, New York, NY.
- Eterbarian, A., Darban, M. Z., & Damirchi, Q. V. (2013). Work life cycle on Erikson's psychosocial growth cycle. *Advances in Environmental Biology*, 7 (9), 2348-2356.
- Ghislieri, G., & Gatti, P. (2012). Generativity and balance in leadership. *Leadership*, 9(3), 257-275.
- Grant, A. M., & Wade-Benzoni, K. A. (2009). The hot and cool of death awareness at work: Mortality clues, aging, and self-protective and prosocial motivations. *Academy of Management Review*, 34(4), 600-622.
- Grossmann, I., Na, J., Varnum, M. E., Park, D. C., Kitayama, S., & Nisbett, R. E. (2010). Reasoning about social conflicts improves into old age. *Proceedings of the National Academy of Science of the U. S. A.*, 107(16), 7246-7250.

- Hayes, A. F. (2013), *Introduction to mediation, moderation, and conditional process analysis*. Guilford Press, New York, NY.
- Hayes, A. F., & Preacher, K. J. (2014). Statistical mediation analysis with a multicategorical independent variable. *British Journal of Mathematical and Statistical Psychology*, 67, 451-470.
- Hofer, J., Busch, H., Chasiotis, A., Kärtner, J., & Campos, D. (2008). Concern for generativity and its relation to implicit prosocial power motivation, generative goals, and satisfaction with life: A cross cultural investigation. *Journal of Personality*, 76(1), 1-30.
- Hunter, E. G., & Rowles, G. D. (2005). Leaving a legacy: Toward a typology. *Journal of Aging Studies*, 19, 327-347.
- Juhl, J., & Routledge, C. (2016). Putting the terror in terror management theory: Evidence that the awareness of death does cause anxiety and undermine psychological well-being. *Current Directions in Psychological Science*, 25(2), 99-103.
- Keyes, C. L., & Ryff, C. D. (1998). Generativity in adult lives: Social structures contours and quality of life consequences. In D. P. McAdams and E. de St. Aubin (Eds.), *Generativity and adult development* (227-263). American Psychological Association, Washington, D.C.
- Keyes, C. L. M., & Shapiro, A. D. (2004). Social well-being in the United States: A descriptive epidemiology. In O. G. Brim, C. D. Ryff and R. C. Kessler (Eds.), *How Healthy Are We? A National Study of Well-Being at Midlife* (350-372). University of Chicago Press, Chicago, IL.
- Kite, M.E., & Wagner, L.S. (2004). Attitudes toward older adults. In T. D. Nelson (Ed.), *Ageism: Stereotyping and prejudice against older persons* (129-161). The MIT Press. Cambridge, MA.
- Kjeldsen, A. M., & Andersen, L. B. (2013) How prosocial motivation affects job satisfaction: An international analysis of countries with different welfare state regimes. *Scandinavian Political Studies*, 36(2), 153-176.
- Leigh, D. (2014). The relationship among generativity, values, individual differences, and commitment to an ideal vision. *Performance Improvement Quarterly*, 27(2), 7-34.
- Macaux, W. P. (2012). Generative leadership: Responding to the call for responsibility. *Journal of Management Development*, 31(5), 449-469.
- Mackinnon, S. P., Nosko, A. Pratt, M. W., & Norris, J. E. (2011). Intimacy in young adults' narratives of romance and friendship predicts Eriksonian Generativity: A mixed methods analysis. *Journal of Personality*, 79(3), 587-618.
- Merriam, S. B. (1993). Butler's life review: How universal is it? *International Journal of Aging and Human Development*, 37, 163-175.
- Murphy Jr., E. F., Gibson, J., & Greenwood, R. A. (2010). Analyzing generational values among managers and non-managers for sustainable organizational effectiveness. *SAM Advanced Management Journal*, 75(4), 33-55.
- Newton, N. J., Herr, J. M., Pollack, J. I., & McAdams, D. P. (2014). Selfless or selfish? Generativity and narcissism as components of legacy. *Journal of Adult Development*, 21, 59-68.
- Norris, F. (2011, January 15). Older workers are keeping a tighter grip on jobs. *New York Times*, p. B3. Retrieved from ProQuest Historical Newspapers
- Pals, J. L. (2006). The narrative identity process of difficult life experiences: Pathways of personality development and positive self transformation in adulthood. *Journal of Personality*, 74, 1079-1110.
- Preacher, K. J., Rucker, D. D., & Hayes, A. F. (2007). Addressing moderated mediation hypotheses: Theory, methods, and prescriptions. *Multivariate Behavioral Research*, 42(1), 185-227.

- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavioral Research Models*, 40(3), 879-891.
- Preacher, K. J., & Kelly, K. (2011). Effect size measures for mediation models: Quantitative strategies for communicating indirect effects. *Psychological Methods*, 16, 93-115.
- Rodgers, B., Marshall, J. Grath, K., Mopkins, D., Remington, J., Siemering, K., & Spivey, J. (2011). Focus on the aging worker, *AAOHN Journal*, 59(10), 447-457.
- Ryff, C., Almeida, D., Ayanian, J., Binkley, N., Carr, D., Coe, S., Davidson, R., Grzywacz, J., Karlamangla, A., Krueger, R., Lachman, M., Love, G., Mailick, M., Mroczek, D., Radler, B., Seeman, T., Sloan, R., Thomas, D., Weinstein, M., & Williams, D. (2016). *National Survey of Midlife Development in the United States (MIDUS 3)*. Inter-university Consortium for Political and Social Research, Ann Arbor, MI.
- Sabir, M. (2015). Personalized and global generativity: A prevalent, important, but unlabeled distinction in the literature. *Journal of Adult Development*, 22(1), 14-26.
- Schramm, J., & Burke, M. E. (2004). Forecasts: A strategic perspective. SHRM Research. Retrieved at <http://www.shrm.org/trends/04forecast.asp>.
- Schoklitsch, A., & Baumann, U. (2012). Generativity and aging: A promising future research topic? *Journal of Aging Studies*, 26, 262-272.
- Seifert, T. (2005). The Ryff scales of psychological well-being. *Center of Inquiry Assessment Notes*. Retrieved at <http://www.liberalarts.wabash.edu/ryff-scales/>.
- Settersten, Jr., R. A., & Hagestad, G. O. (2015). Subjective aging and new complexities of the life course. *Annual Review of Gerontology & Geriatrics*, 35, 29-53.
- Sinnott, J. D. (2009). Complex thought and construction of the self in the face of aging and death. *Journal of Adult Development*, 16(3), 155-165.
- Stark, E. (2009). Fractures, fissures, and fault lines: Challenges accompanying Baby Boomers retaining employment in a recovering U.S. economy. *Journal of Applied Management and Entrepreneurship*, 14(3), 3-26.
- Stark, E., Poppler, P., & Ashley, G. (2014). Protect gerontocracies or make a path for the young? Rethinking the case for mandatory retirement age. In S. Sturgeon and E. Stark (Eds.). *RIThink*, 3, 50-57.
- Stein, J. H., & Cropanzano, R. (2011). Death awareness and organizational behavior. *Journal of Organizational Behavior*, 32, 1189-1193.
- Stewart, A. J., & Ostrove, J. M. (1998). Women's personality in middle age: Gender, history, and midcourse corrections. *American Psychologist*, 53, 1185-1194.
- Steward, A. J., Ostrove, J. M., & Helson, R. (2001). Middle aging in women: Patterns of personality change from the 30s to the 50s. *Journal of Adult Development*, 8, 23-37.
- Steward, A. J., & Vandewater E. A. (1999). If I had it to do over again: Midlife review, midcourse corrections, and women's well-being in midlife. *Journal of Personality and Social Psychology*, 76(2), 270-283.
- Tabachnick, B. G., & Fidell, L. S. (2013). *Using Multivariate Statistics (6th Edition)*. Person, New York, NY.
- Templer, A., Armstrong-Stassen, M., & Cattaneo, J. (2010). Antecedents of older workers' motives for continuing work. *Career Development International*, 15(5), 479-500.

- Thibodeau, P. (2015, April 23). Median age at Google is 29, says age discrimination lawsuit, *Computer World*. Retrieved from <http://www.computerworld.com/article/2914233/it-careers/median-age-at-google-is-29-says-age-discrimination-lawsuit.html>.
- Toossi, M. (2012, January). Labor force projections to 2020: A more slowly growing workforce. *Monthly Labor Review*, 43-64.
- Torges, C. M., Stewart, A. J., & Duncan, L. E. (2008). Achieving ego integrity: Personality development in later midlife. *Journal of Research in Personality*, 42, 1004-1019.
- U.S. Bureau of Census (2016). *Aging in the United States: Past, present, and future*. Retrieved at <https://www.census.gov/population/international/files/97agewc.pdf>.
- Vasconcelos, A. F. (2015). Older workers: Some critical societal and organizational challenges. *Journal of Management Development*, 34(3), 352-372.
- Wakefield, J. C. (1998). Immortality and the externalization of the self: Plato's unrecognized theory of generativity. In D. P. McAdams and E. de St. Aubin (Eds.), *Generativity and adult development: How and why we care for the next generation* (133-174). American Psychological Association, Washington, D.C.
- Washington Times* (2007, July 10), "Economy to struggle as Baby Boomers retire." Retrieved from <http://www.washingtontimes.com/news/2007/jul/10/economy-to-struggle-as-baby-boomers-retire>.
- Wiesmann, U., & Hannich, H-J. (2011). A salutogenic analysis of developmental task and ego integrity vs. despair. *International Journal of Aging and Human Development*, 73(4), 351-369.